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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G06F 17/60 — A1

(11) International Publication Number: WO 99/22321

(43) International Publication Date: 6 May 1999 (06.05.99)

(21) International Application Number: PCT/AU98/00887

(22) International Filing Date: 26 October 1998 (26.10.98)

(30) Priority Data:

PO 9987	24 October 1997 (24.10.97)	AU
PP 2078	2 March 1998 (02.03.98)	AU

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(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

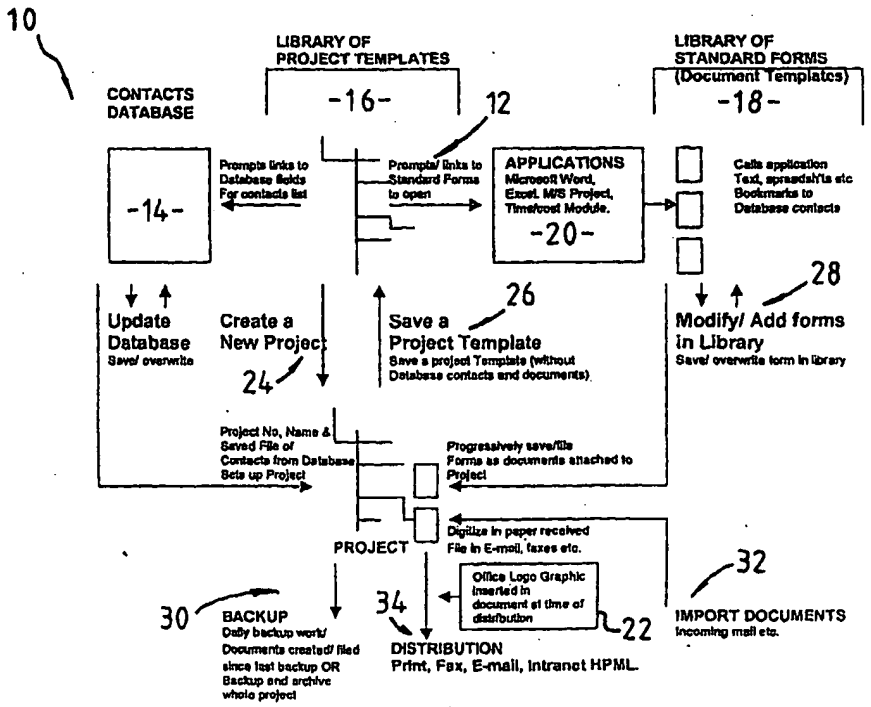
Published

With international search report.

(54) Title: COMPUTER MANAGEMENT SYSTEM

(57) Abstract

A computer management system (10) is provided for operating a computer and application programs (20) from projects. The system (10) stores information related to individual projects in memory of the computer and comprises project selection means for selecting a desired project and linking means (12) for linking information and tasks related to each project. The linking means (12) has a file path including task categories and information classes for each task category so that documents for each class are automatically saved in a predefined path. The information classes are adapted to contain document identifications. In use the selection means is used to select a project and from which a desired document in an information class can be selected. The system (10) can create a new project (20) with newly defined linkages, save off an existing project or model on a project template (16). Any of the projects can be made a project template (26). The linking means also has a database (14) containing contact and client details from which the details are retrieved and inserted automatically in bookmarked positions in a document being created. The application program for a selected document is run automatically on selecting the document.



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"COMPUTER MANAGEMENT SYSTEM"

FIELD OF THE INVENTION

THIS INVENTION relates to a computer management system for managing information and tasks for businesses or professional organisations, and in particular but not limited thereto to a computer management system for managing information and tasks for a business or professional project so that all information and tasks for the project made available to a particular user are accessible within a single project folder.

BACKGROUND TO THE INVENTION

The applicant has worked in a number of business and professional organisations in different countries and has found that people in these organisations continue to use paper based correspondence and other documents despite advances made in the computer industries in recent years. The aim of a paperless office is therefore far from realisation.

Amongst many of the reasons for the continuing use of paper based documents are difficulties in locating desired information stored on the computer system and many information such as client addresses and formats of correspondence required for tasks to be done on the computer system need to be manually entered each time a document is to be created, after spending considerable time finding the addresses and deciding on the appropriate formats and layouts for the documents. In addition the tasks for a project generally require the use of different application programs which need to be located and opened. Often files saved by the programs are difficult to identify, and if there are many files they are also difficult to find as there is no logical filing system and different users name files in accordance to their preferences.

Fear of the security of computer records is another reason for people to continue to use paper based documents.

Accounting packages currently in use are solely for accounting purposes. These packages do not allow for monitoring of project performance of production staff.

OBJECT OF THE INVENTION

It is an object of the present invention to provide a computer management

system which alleviates or reduces to a certain level one or more of the prior art disadvantages.

Other objects will be evident from the following description.

DISCLOSURE OF THE INVENTION

In one aspect the present invention resides in a computer management system comprising project selection means for selecting any one of a plurality of projects, the projects each having related information stored on memory means of the computer system, and means for linking information and tasks related to each project. The linking means is arranged so that the selection means can be selectively activated to present one or more task categories and one or more information classes in each task category. Each information class is adapted to hold documents, when created, intended for this class so that information relevant to a particular class in a task category can be obtained by selecting the appropriate task category and information class.

In another aspect the present invention resides in a management program stored on a computer readable medium, the program comprising project selection means for selecting any one of a plurality of projects, the projects each having related information stored on memory means of the computer system, and means for linking information and tasks related to each project. The linking means is arranged so that the selection means can be selectively activated to present one or more task categories and one or more information classes in each task category. Each information class is adapted to hold documents, when created, intended for this class so that information relevant to a particular class in a task category can be obtained by selecting the appropriate task category and information class.

It should be noted that the term "project" as used herein includes any construction projects, research projects, commercial projects, educational projects, financial projects, legal projects and the like; and the term "document" includes one or a combination of two or more of a letter, an accounting or financial report, a time costing report, a project report, a drawing, picture, graphic or other image, and an audio file.

Hereinafter the word "system" should be considered to include "software"

for features common to the aspects of the present invention.

Any of the task categories may include one or more sub-categories and the system has sub-category selection means for selecting the sub-category or any one of the sub-categories. In an example the sub-categories are in the form of recipients of the tasks.

In an embodiment the task categories for an architecture project include project information, contract fees, correspondence, design, meetings, authorities, program, budget costs, production, tender, contract administration, and close out. The recipients for this embodiment include acoustic engineer, builder, client, electrical engineer, general matters, hydraulic engineer, interior designer, mechanical engineer, quantity surveyor, and structural engineer.

The information classes may include fax, letter, memo, telephone log and report.

Preferably the system of the present invention includes invoking means for invoking an appropriate application program when a document in an information class is to be created or selected.

Desirably the linking means includes a linkage database containing the information relevant to the or each information class. The linking means may also include a filing arrangement for automatic filing documents under the relevant information classes for the task categories.

The system conveniently includes project creation means for creating a new project. The project creation means may have a project template selector for selecting a project template for the new project from a library of project templates stored in the memory means. The selected project template typically has forms on which information for the new project are entered; and project modifying means for modifying a project. Alternatively the project creation means may copy an existing project as a new project.

Conveniently the system of the present invention has a database of information and certain information for the forms can be called from the database and inserted automatically. Typically this database includes contact details such as recipient details.

The system may also include a library of document templates which can

be accessed within an application program. The linking means is arranged so that predetermined document templates are automatically linked to relevant information classes.

Typically the system includes a document template creation means for adding to the library of document templates and document template modifying means for modifying a document template.

Desirably the contact database and the document templates are linked to projects so that appropriate information in the database relevant document templates are available to the projects. This reduces computer memory usage by the system as information common to different projects need not be separately stored.

The system of the present invention may have stored graphics such as office logo for insertion into documents. Desirably the graphics are automatically inserted into an appropriate location of a document when printing or when sending the document through a communications system such as email or facsimile. The graphics are advantageously not inserted in the document when saving or archiving in order to minimise the size of required computer storage.

Conveniently communications programs such as email, facsimile, internet browser, and the like are invokable through the system. More conveniently any of these communications programs can be invoked by a user command or selecting an icon or button within any stage of the system.

Desirably information related to an information class within a task category or a sub-category is made readily accessible. Said desirable information may be memo, telephone messages and the like which are associated with the task. It is also desirable that email message, diary, contact listing and/or "to do" list for the user are made readily available. The availability can be selected by entering appropriate user commands which may be buttons or icons for activation on the computer screen.

It is particularly advantageous that the system of the present invention has means for intercepting a save command entered within any of the application programs so that all documents or files for the selected project are saved in predetermined folders. More particularly, the linking means has a file path

determining means which automatically save to and retrieve from the predetermined folders. The file path allows users to find files logically.

In order to prevent tampering of any saved documents/files, the system of the present invention may have means for preventing tampering of records and/or files of any of the projects. Such means include designating all or selected save files and/or records as "read only", and/or with password protection. The tampering preventing means can be made password sensitive so that certain functions and activities are not active for users not authorised to alter files and/or records.

Desirably the system of the present invention has password verification means so that only a user supplying the correct password for the user can have access to the system. Preferably the system has different levels of access so that users can only have access to projects and/or certain information and certain functions/activities in projects which are made available to those users.

It is also desirable that the system of the present invention has a backup facility so that a copy of the database and the projects stored on the memory means of the computer system is made regularly and/or upon receiving an appropriate user command. Preferably the backup facility is invoked routinely.

The system of the present invention may be provided with an archiving means for archiving records and information of the projects stored on the memory means. The archiving means is advantageously selective so that the user can select any of the projects or any records or information associated with one or more selected projects for archiving.

The system of the present invention can also be provided with a restoring means for selectively restoring any record or information that has been archived.

The system may also have an audit trail facility which allows an auditor to trace information such as documents created, documents transmitted, letters forwarded, receipt issued, etc.

The system is desirably adaptive so that other application programs and add on modules for specific projects or additional functionalities can be easily incorporated into the system. Time/cost project management module is one such add on module for the system. The time/cost module may be used by project

team managers and production staff to monitor their performance, the project's performance and their percentage chargeable time.

In a further aspect the present invention resides in a monitoring system for monitoring project performance. The monitoring system includes memory means for storing information relating to one or more projects and information relating to members working on the one or more projects; and programming means arranged for providing project performance. The project performance and/or individual member performance are derived from the stored project information and the member information.

Typically the project information and the member information are arranged in a database stored on the memory means.

The database includes one or more project records and one or more member records. Each project record includes a unique project identification and project costs. The project identification may be a unique number field for each project and may also include a project name field and/or manager name field.

Desirably the unique project number field includes a start component which indicates project starting year and a sequentially incremental project number for that year. It can also include a component which indicate a cost category of the project.

The project costs may advantageously include a project type field and/or an overhead allocation field.

The project type may include regular cost components such as direct labour costs, direct expenses, reimbursements and "rework" costs; overhead cost components such as indirect labour costs and indirect expenses; and promotional project components for projects overlapping fiscal years.

Examples of the indirect labour costs and indirect expenses are general overhead, vacation, sick leave, holiday, business development, accounting, research and development, civic duty , professional development and the like.

Each member record typically includes a unique member identification filed and a member class field. The unique member identification field may include a unique member number component and member name component.

The member class field may include a member class component for charge

out level determination, a base pay rate component for actual project costs consideration.

If members are to be paid overtime then the member class field may also include an overtime component.

If members have both chargeable and non-chargeable times then each member record can have a target ratio of chargeable to non-chargeable times.

It is advantageous that each project record and each member record have a grouping field so that performance of the grouping can also be indicated. Typically the grouping is a department or a section of an organisation.

In preference the monitoring system of the present invention includes an online time sheet entry form for entering information relating to work done on the one or more projects. Typically the time entry form includes information for period ending, member number, grouping, chargeable time, non-chargeable time, hourly rate, expenses and the like, whereby performance of members and/or groupings and/or projects can be monitored. The monitored performance may also be used in predicting suitable staff members, budget and timings for future projects.

The individual member performance may be in the form of a ratio of actual chargeable vs non-chargeable time. Desirably this ratio is superimposed on a target ratio so that each member can view performance against the target ratio.

The actual ratio and the target ratio is preferably calculated to the current period ending and/or the year to date.

The individual member performance may also include an indication of time expended vs budgeted time.

The monitoring system of the present invention can be provided with another online information entry form for entering allowable expenses. Said allowable expenses may include outside consultant services, travel and meals, reproductions, telephone charges, etc.

Desirably outside consultant services information entry is on a separate form which schedules each consultant and provides reconciliation of the fees expended, accrued, billed or not, and paid.

Conveniently the monitoring system of the present invention has a fee

billing facility for the or each project. In the fee billing facility, labour costs, outside consultant fees and reimbursements may be included as fixed costs, time charges, or variations of these for various parts of a project.

If is preferred that relevant information stored on the memory means can be exported to an accounting package which performs general accounting tasks.

It is also preferred that the monitoring system of the present invention has import facility for importing relevant information from the accounting package.

As a security measure, the information entered for the time sheet entry and/or for outside consultant services must be authorised by a person with an appropriate password before they can be posted into the system.

The programming means is arranged to select the appropriate information stored on the memory means and to perform operations to generate one or more of the following reports:

* Time analysis report;
* Project progress report (including projected cash low report);
* Project detail report;
* Project summary report (including projected cash flow report); and
* Reports to focus on pareito information.

The programming means may also be adapted to generate a "resource balancer" report based on the member class field. The "resource balancer" report allows projects to be prioritised and members to be allocated to projects by class on the basis of the resource available and project demands.

The "rework" component may be used to generate a report which identifies projects or parts of projects which have a high rework component.

The relevant information exported to the accounting package can be used to generate the followings:

* Invoicing information;
* Wages time data;
* Disbursements; and
* Project data.

It is preferred that the monitoring system has a multi-level security access arrangement so that members have different levels of access. As an example, the

security access arrangement has 4 levels of access and the access for each level may be as follows:

* System defaults	1			
* Export files to accounting system	1			
* Check time sheets before posting		2		
* Check project budgets before posting		2		
* Create reports (Firmwide)		2		
* Check and modify other data entry before posting		2		
* Create a new project		2		
* Archive or delete a project		2		
* Back-up (in single user version)		2		
* Create a project budget			3	
* Modify budgets monthly			3	
* Create Reports particular to Department			3	
* Create and reconcile fee invoicing			3	
* Reconcile outside consultant fees			3	
* Enter direct expenses data			3	
* Enter own time sheets				4
* View data specific to own projects				4

The monitoring system may be a stand-alone system or an add on module or an integral part of the system described earlier as one aspect or another aspect of the invention.

The applicant has ingenuously developed a number of features which work in synergism together. Each or combinations of selected ones of the features may be considered inventive and the applicant reserves the right to divide out any of the inventive features or combinations in separate applications.

The system according to a preferred embodiment of the present invention allows a user to operate a computer in projects, and jobs or matters relevant to a selected project. The system allows a project to be created by selecting a predefined project template which has predetermined links between task categories, task sub-categories, information classes and document templates within each class; or copied from an existing project whereby workflows, jobs or matters

in a previous project can be easily duplicated. A document to be created can be selected from a document template, and contact and/or recipient details are entered automatically in the document once the contact and/or recipient are identified. The system runs an application program for a selected document automatically and saves the document in a predefined file path. Project creations within an organisation are therefore largely automatic and highly consistent. Once created the documents are filed in a predetermined file path within a project, and therefore allows a subsequent user to locate it easily.

BRIEF DESCRIPTION OF THE DRAWINGS

In order that the present invention can be readily understood and put into practical effect the description will now be made in reference to the accompanying drawings which illustrate preferred embodiments of the present invention and wherein:-

Figure 1 is an overall flow diagram showing major linkages between major components of an embodiment of the computer management system according to the present invention;

Figure 2 shows a main screen of the computer system shown in Figure 1;

Figure 3 shows a screen containing project details following selection of a project in the screen of Figure 2;

Figure 4 shows the Figure 2 screen with expanded project icons;

Figure 5 shows a screen containing details of a master project profile;

Figure 6 shows a screen in the new document wizard;

Figures 7 shows a screen containing a list of contacts;

Figure 8 shows a document log containing history of actions on the documents;

Figure 9 shows a screen containing staff timesheets;

Figure 10 shows a screen for timesheet detail entry;

Figures 11 and 12 are forms for entering contact details;

Figure 13 and 15 are forms for entering budget details;

Figure 16 and 17 are forms for entering fees details;

Figure 18 and 19 are time cost reports;

Figure 20 is a flow diagram showing a project monitoring system

according to the present invention functioning as an add on module for a computer management system and interfacing with an accounting system; and

Figure 21 is a hierarchical report order for the monitoring system shown in Figure 20.

DETAILED DESCRIPTION OF THE DRAWINGS

Referring to Figure 1, there is shown an overall flow diagram for the computer management system 10 according to the present invention. As can be seen the system 10 has linking means 12 with linkages to a contact database 14, a library 16 of project templates, and a library 18 of document templates. The linking means 12 automatically invokes an appropriate application from stored applications 20 when a document template or a document is selected.

The selected document or document template has predefined locations or bookmarks where contact details from the contact database 14 and office logo 22 are to be inserted. The system 10 also has a project creation function 24 to create new projects and saving means 26 for saving a created project as a project template. A modifying means 28 for modifying the library 18 is provided for editing an existing document template or adding a new document template in the library 18.

The linking means 12 progressively save and/or file template documents as documents attached to the selected project in a predefined file path; and the saved documents are linked to the project number and contacts from the database 14.

The linkages, the bookmarks, the application program to be invoked and the file path for each document in a project are contained in a linkage database (not shown).

The system 10 also has a backup function 30 for backing up documents periodically or for archiving selected projects. The system 10 allows documents 32 such as facsimiles, email, scanned documents etc. to be imported. A distribution means 34 is included for distributing created documents and imported documents to targeted computers in a network. In order to save computer storage the office logo is not saved in the created documents.

This system 10 utilises the Microsoft Window™ login password for

validating access and access level allowed for the user. If desired a separate login menu for the computer management system 10 can be incorporated. The login menu may be a window or a box on the computer monitor. It will prompt a user to enter the user name at the user prompt and password at the password prompt. When they are entered the system checks the entered name and compares the entered password with a previously stored password for the entered user name. If the user name is not on a list of authorised users the system alerts the user and prompt for another user name. If the entered user name is found on a user database but the entered password does not match the one on the databases the system prompts the user to re-enter the password. The system will allow access to the next phase of the system only when the entered user name is authorised and the entered password matches the one stored on the database.

When the system 10 is operating it initially presents a main screen 36 as shown in Figure 2. The screen 36 allows the user to select functions through drop down menus 38 identified by the titles "File", "Projects", "TimeCosting", "Tools" and "Help".

Selecting "File" allows the user to access to the functions "New Project", "Edit Project", "Delete Project", "Document Template Editor", "New Document Wizard", "Search dor Documents" and "Document Import". Under "Project" the functions can be accessed are "Budget", "Fees", "Master Project Profile Editor" and "Project Profile Editor". "Timesheets", "Reports", "Master Phases" and "Project Phases" can be selected under "TimeCosting" and "Contacts", "Departments", "Classes", "Activities", "Staff", "Company Logo", and "Defaults" under "Tools". The "Help" drop down menu has the usual function "Help" as well as "Database Explorer".

The screen 36 also has radio buttons 40 for frequently used functions which in this embodiment are "New Project", "Edit Project", "Add/Edit Contacts", "New Documents", "Document Search" and "Timesheets".

Below the radio buttons 40 are a left window 42 containing project icons and a left window 44 containing a list project details. More details of a project is accessible in a further window 46 as shown in Figure 3 by selecting the project in the window 42. The project icons in the window 42 can be expanded by

selecting to show a hierarchical filing structure as shown in Figure 4. The tree structure shows the linkages between the task types, recipients and document classes for each project. In the example shown in Figure 4, project no. 5148 has two task types (CCoresp for correspondence and DDEsign for design). For CCoresp the recipients are clients and document class is letter. For DDesign the recipients are also clients and the document class is briefs. While Figure 4 shows a single recipient sub-category and a single document class for a task type the system 10 may have a plurality of recipient sub-categories and a plurality of document classes selected from a mater project profile as in Figure 5

Referring again to Figure 4 when a document class is selected the system 10 presents another set of radio buttons 48 in window 44. These radio buttons include the functions for creating a new document, removing a document, sending a document, printing a document, transferring a document in the document class and editing a document.

When the new document radio button is selected the system 10 presents a document template selection screen as shown in Figure 6. The user may select one of the existing template or add a new template to the linkages. Upon selection of a template the system 10 prompts the user to enter a document category, recipient and document class before invoking an application program appropriate for creating the document.

Figure 7 shows a contact selection screen which is revealed when the add/edit radio button is pressed. The user can select a desired contact to be inserted in a bookmarked position in a document. This screen also allows the user to add, edit or delete any of the contacts.

Pressing the document search button reveals a document log as shown in Figure 8 with history of actions on the documents. This allows the user to ascertain the actions taken in relation to any documents in a quality assurance operation or audit trail operation.

The time sheet radio button allows access to timesheets of staff members as shown in Figure 9. This screen may be selectively chosen to display the timesheets of all entries, only incomplete entries, all staff, user only or by week ending date. Figure 10 is a form for entering or editing timesheet details and is

accessed by selecting the "New" or "Edit" prompt in Figure 9.

Figures 11 and 12 are respectively "Add" and "Edit" form for the contact details and they are accessible through the contact selection screen shown in Figure 7.

Figures 13 to 15 shows forms for entering budget details and Figures 16 and 17 forms for fees details.

TimeCosting reports are shown in Figures 18 and 19.

Referring now to Figure 20, there is shown a project monitoring system 50, in this case a project control system, in accordance with another embodiment of the present invention. The system 50 as shown is linked to an accounting system 58.

The monitoring system has input means 52 which enable users to enter time sheet information, project expenses and project budgets. The entered data are stored in storage means such as a hard disk.

Programming means 54, in this case project control system programs, selects appropriate data from the hard disk to generate one or more reports at output means 56. The output means 56 can be a computer monitor or a printer.

As can be seen entered data are exported to the accounting system 58 for generating other reports. The monitoring system 50 is programmed so that it can use information normally associated with the accounting system 58 for generating appropriate reports.

Although not shown it should be understood that the monitoring system 50 has a multi-level access arrangement so that only users with the appropriately authorised passwords can access facilities allocated under the passwords.

As a further security measure identification codes (PIN) corresponding to respective passwords must be entered before the users are allowed access to any facility provided by the system 50.

In an exemplary application of the system 50, at the beginning of an accounting period or fiscal year all the files for the system are initialised. This may require the system to "rule off" the data so that actuals are recorded at the

expiration of the period. Staff members can then enter and post time sheet details at, say, each pay period. Expenses and reimburseable items are also entered and posted regularly.

Budgets for projects are entered typically by project managers about 14 days ahead of monthly budgets and projections of budgets are entered about 6 months ahead.

Regular review of the monthly budgets and projections are necessary so that any variations can be taken account off.

The budgets and projections are used to generate cash flow reports.

Resources based on the budgets and time sheet data can be used to check against projects and then balanced resources can be allocated firmwide.

In this example, projects are grouped and staff members may work on projects from various groups. Therefore resource balancing between groups can involve rearranging staff resources between groups to suit particular demands and priorities.

As each member record has a class component, the classes of staff members can be readily interchanged between projects and they facilitate resource balancing.

At the end of each accounting period each project manager estimates the stages in each phase of the projects worked on during that period.

The time sheets and expenses of staff members, outside consultant fees which have been expended and to be completed are also entered at this stage.

Projected cash flow budgets are then reviewed.

Hierarchical reports as shown in Figure 20 can the be generated for project monitoring.

Whilst the above has been given by way of illustrative example of the present invention, many variations and modifications thereto will be apparent to those skilled in the art without departing from the broad ambit and scope of the invention as herein set forth.

CLAIMS

1. A computer management system comprising project selection means for selecting any one of a plurality of projects, the projects each having related information stored on memory means of the computer system, and means for linking information and tasks related to each project; the linking means is arranged so that the selection means can be selectively activated to present one or more task categories and one or more information classes in each task category; each information class is adapted to hold documents, when created, intended for this class so that information relevant to a particular class in a task category can be obtained by selecting the appropriate task category and information class.

2. A computer management program stored on a computer readable medium, the program comprising project selection means for selecting any one of a plurality of projects, the projects each having related information stored on memory means of the computer system, and means for linking information and tasks related to each project; the linking means is arranged so that the selection means can be selectively activated to present one or more task categories and one or more information classes in each task category; each information class is adapted to hold documents, when created, intended for this class so that information relevant to a particular class in a task category can be obtained by selecting the appropriate task category and information class.

3. The invention according to claim 1 or claim 2 wherein at least one of the task categories including one or more sub-categories and the invention having sub-category selection means for selecting the sub-category or any one of the sub-categories.

4. The invention according to claim 1 or claim 2 wherein further including invoking means for invoking an appropriate application program when a document in an information class is to be created or selected and the linking means includes a filing arrangement for automatic filing documents under the relevant information classes for the task categories.

5. The invention according to claim 1 or claim 2 wherein further including project creation means for creating a new project, the project creation means

having a project template selector for selecting a project template for the new project from a library of project templates stored in the memory means and the selected project template having input forms for entering information for the new project; and project modifying means for modifying an existing project.

6. The invention according to claim 5 wherein the invention having a database of information and certain information for the forms can either be called from the database or inserted automatically by a user command.

7. The invention according to claim 1 or claim 2 wherein The invention including a library of document templates which can be accessed within an application program and the linking means is arranged so that predetermined document templates are automatically linked to relevant information classes.

8. The invention according to claim 7 wherein the invention including a document template creation means for adding to the library of document templates and document template modifying means for modifying a document template.

9. The invention according to claim 7 wherein the contact database and the document templates are linked to projects so that appropriate information in the database and appropriate document templates are made available to the projects.

10. The invention according to claim 1 or claim 2 wherein the invention having stored graphics for insertion into documents and the graphics are automatically inserted into an appropriate location of a document when printing or when sending the document through a communications system.

11. The invention according to claim 1 or claim 2 wherein the invention further including an audit trail facility which allows an auditor to trace history of actions on a created document.

12. The invention according to claim 1 or claim 2 wherein the invention is adaptable to selectively incorporate application programs and/or add on modules for specific projects and/or additional functionalities.

13. The invention according to claim 12 wherein the invention incorporates a Time/cost project management module.

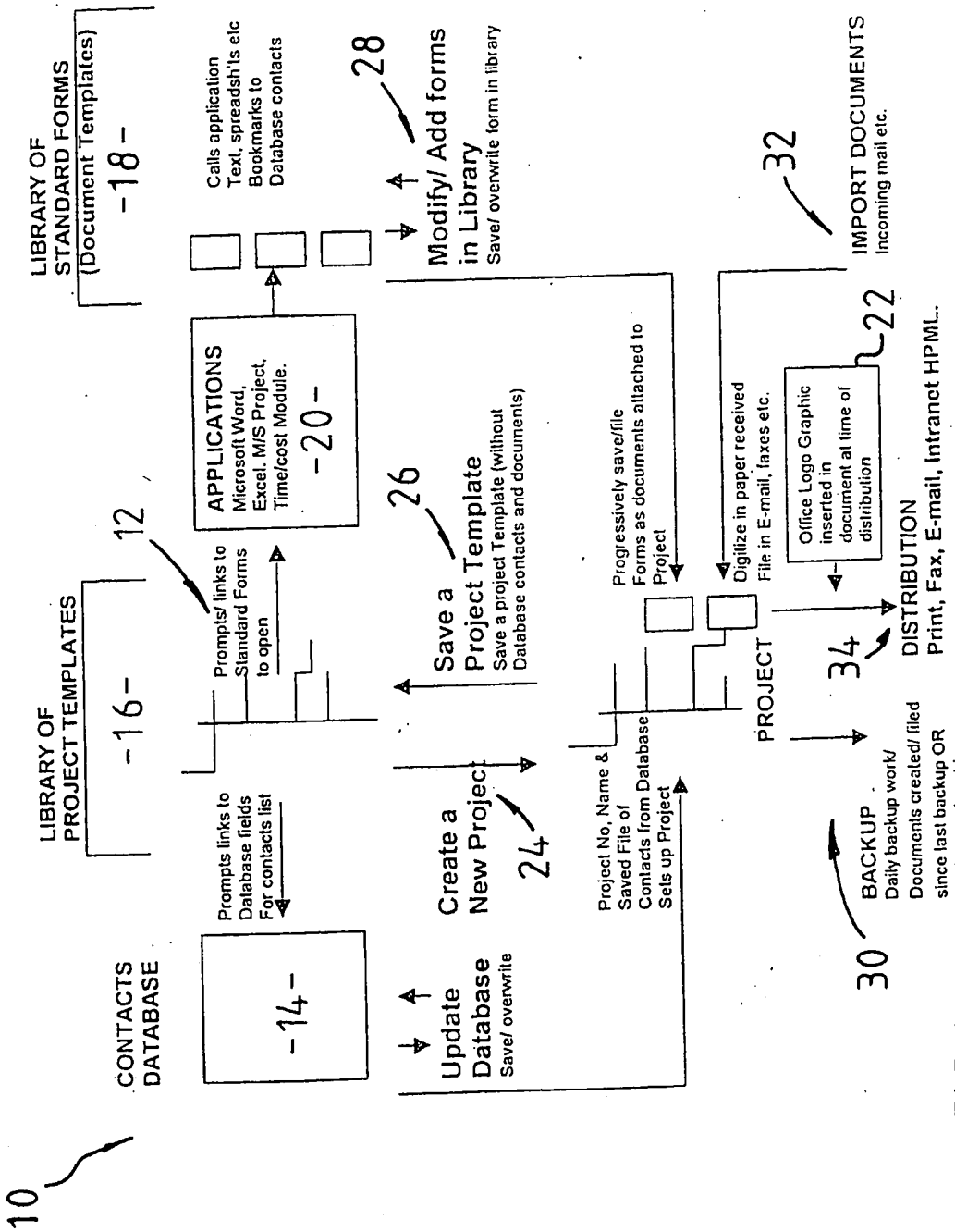
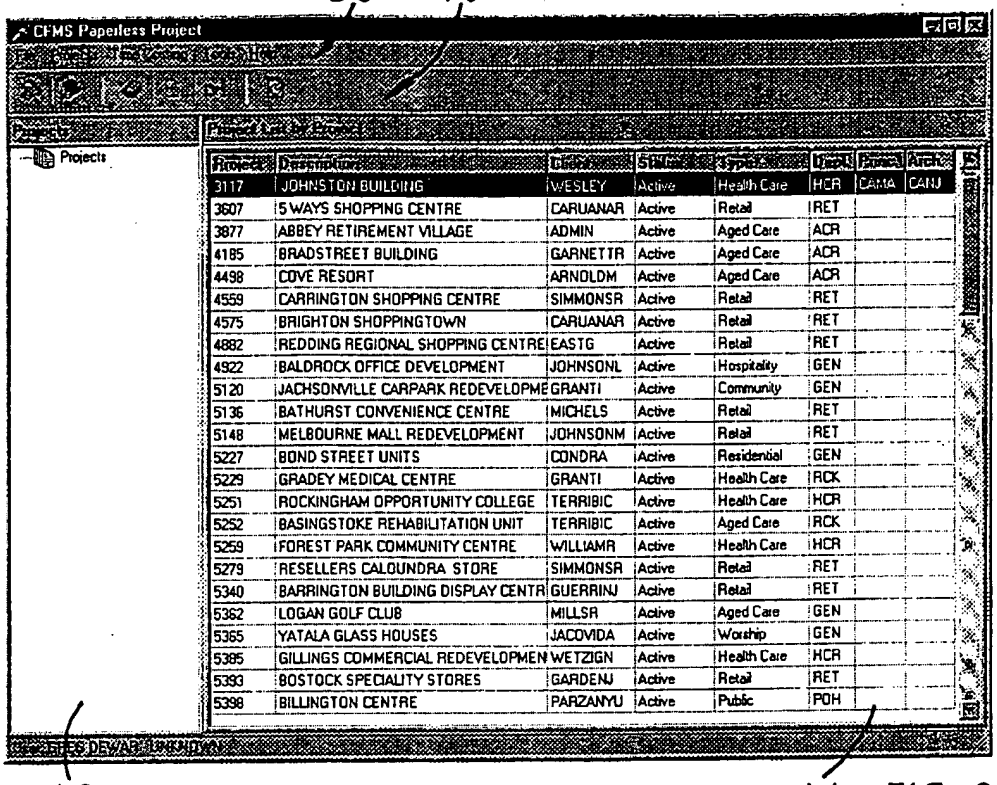

10
CONTACTS DATABASE
-14-
Update Database
Save/ overwrite
LIBRARY OF PROJECT TEMPLATES
-16-
12
Prompts/ links to Standard Forms to open
Prompts links to Database fields For contacts list
APPLICATIONS
Microsoft Word, Excel, M/S Project, Time/cost Module.
-20-
Calls application Text, spreadsh'ts etc Bookmarks to Database contacts
LIBRARY OF STANDARD FORMS
(Document Templates)
-18-
28
Modify/ Add forms in Library
Save/ overwrite form in library
26
Save a Project Template
Save a project Template (without Database contacts and documents)
Create a New Project
24
Project No, Name & Saved File of Contacts from Database Sets up Project
Progressively save/file Forms as documents attached to Project
PROJECT
Digilize in paper received File in E-mail, faxes etc.
Office Logo Graphic inserted in document at time of distribution
22
32
IMPORT DOCUMENTS
Incoming mail etc.
34
DISTRIBUTION
Print, Fax, E-mail, Intranet HPML.
30
BACKUP
Daily backup work/ Documents created/ filed since last backup OR Backup and archive whole project

FIG. 1



Project	Description	Client	Status	Type	Dept	Proj	Arch
3117	JOHNSTON BUILDING	WESLEY	Active	Health Care	HCR	CAMA	CANJ
3607	5 WAYS SHOPPING CENTRE	CARUANAR	Active	Retail	RET		
3877	ABBEY RETIREMENT VILLAGE	ADMIN	Active	Aged Care	ACR		
4185	BRADSTREET BUILDING	GARNETTR	Active	Aged Care	ACR		
4498	COVE RESORT	ARNOLDM	Active	Aged Care	ACR		
4559	CARRINGTON SHOPPING CENTRE	SIMMONSR	Active	Retail	RET		
4575	BRIGHTON SHOPPINGTOWN	CARUANAR	Active	Retail	RET		
4882	REDDING REGIONAL SHOPPING CENTRE	EASTG	Active	Retail	RET		
4922	BALDROCK OFFICE DEVELOPMENT	JOHNSONL	Active	Hospitality	GEN		
5120	JACHSONVILLE CARPARK REDEVELOPME	GRANTI	Active	Community	GEN		
5136	BATHURST CONVENIENCE CENTRE	MICHELS	Active	Retail	RET		
5148	MELBOURNE MALL REDEVELOPMENT	JOHNSONM	Active	Retail	RET		
5227	BOND STREET UNITS	CONDRA	Active	Residential	GEN		
5229	GRADEY MEDICAL CENTRE	GRANTI	Active	Health Care	RCK		
5251	ROCKINGHAM OPPORTUNITY COLLEGE	TERRIBIC	Active	Health Care	HCR		
5252	BASINGSTOKE REHABILITATION UNIT	TERRIBIC	Active	Aged Care	RCK		
5259	FOREST PARK COMMUNITY CENTRE	WILLIAMR	Active	Health Care	HCR		
5279	RESELLERS CALOUNDRA STORE	SIMMONSR	Active	Retail	RET		
5340	BARRINGTON BUILDING DISPLAY CENTR	GUERRINJ	Active	Retail	RET		
5362	LOGAN GOLF CLUB	MILLSR	Active	Aged Care	GEN		
5365	YATALA GLASS HOUSES	JACOVIDA	Active	Worship	GEN		
5385	GILLINGS COMMERCIAL REDEVELOPMEN	WETZIGN	Active	Health Care	HCR		
5393	BOSTOCK SPECIALITY STORES	GARDENJ	Active	Retail	RET		
5398	BILLINGTON CENTRE	PARZANYU	Active	Public	POH		

FIG. 2

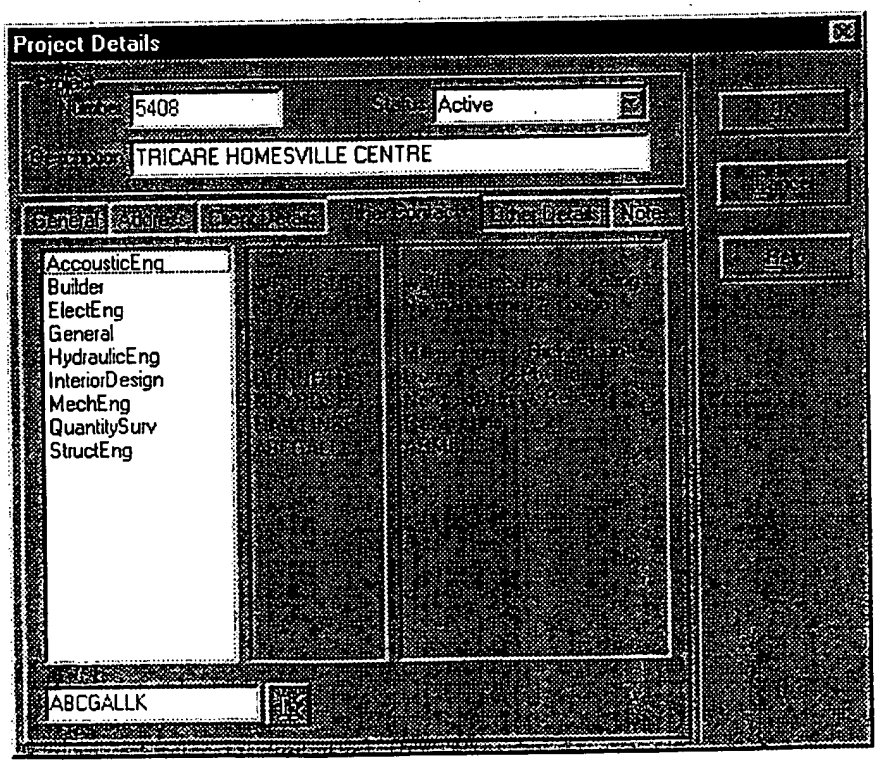
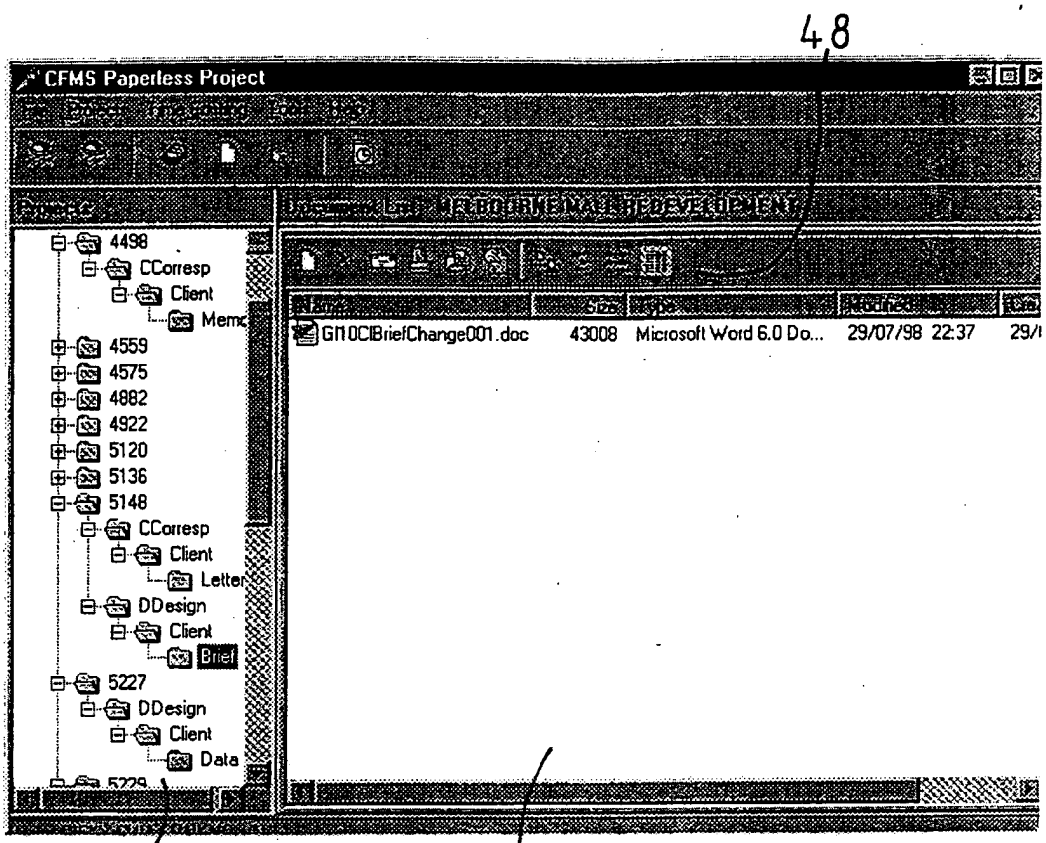


FIG. 3


48
CFMS Paperless Project
4498
CCorresp
Client
4559
4575
4882
4922
5120
5136
5148
CCorresp
Client
DDesign
Client
Brief
5227
DDesign
Client
Data
GI10CIBriefChange001.doc
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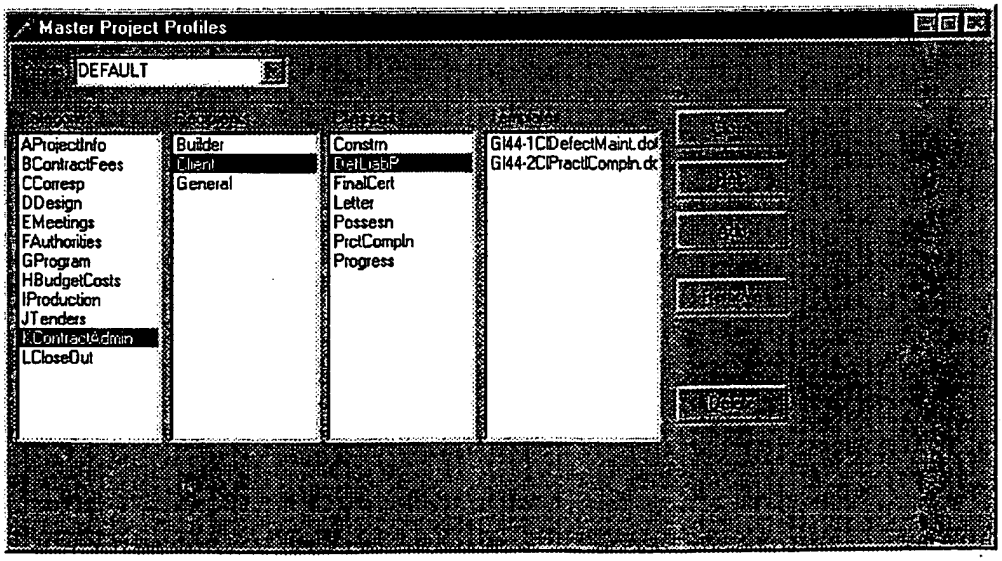
29/07/98 22:37
42
44

FIG.4


Master Project Profiles
DEFAULT
AProjectInfo
BContractFees
CCorresp
DDesign
EMeetings
FAuthorities
GProgram
HBudgetCosts
IProduction
JTenders
KContractAdmin
LCloseOut
Builder
Client
General
Constrn
DetLiabP
FinalCert
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Possesn
PrctCompln
Progress
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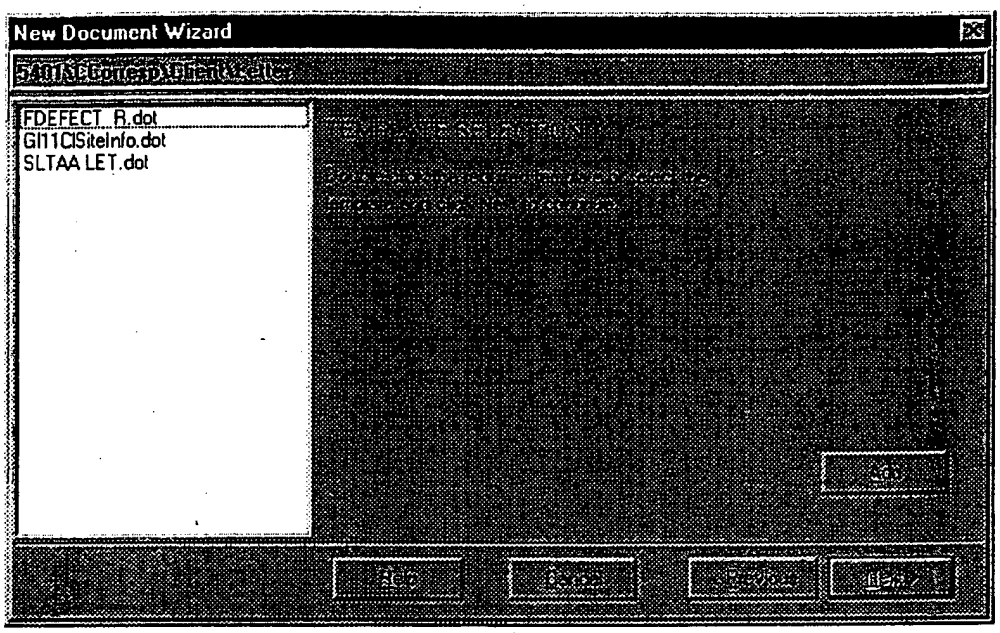
GI44-2CIPractlCompln.dc

FIG. 5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GI11ClSiteInfo.dot
SLTAA LET.dot

FIG. 6

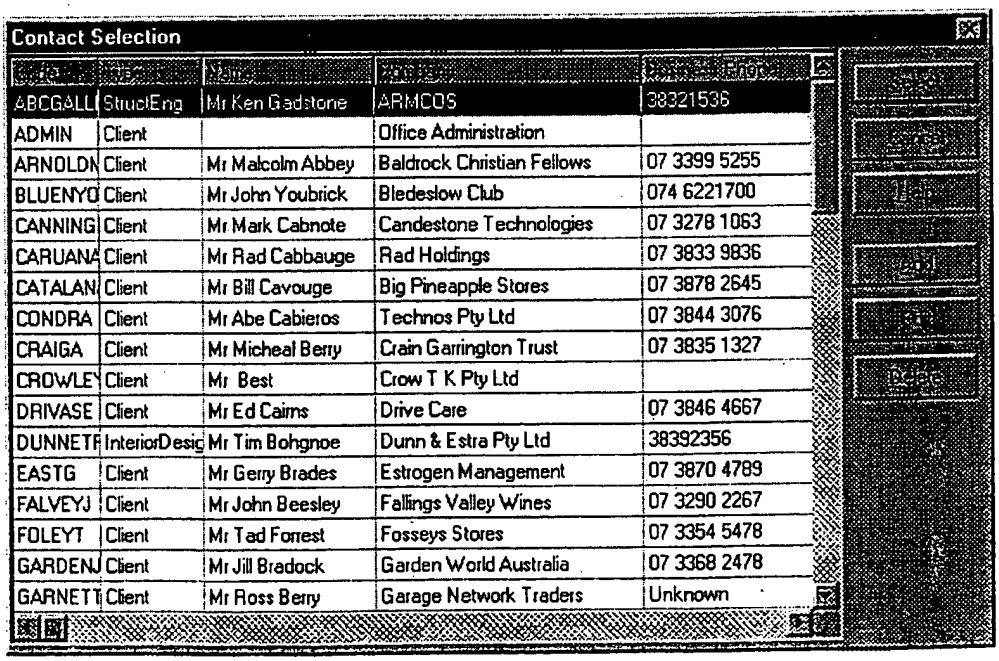
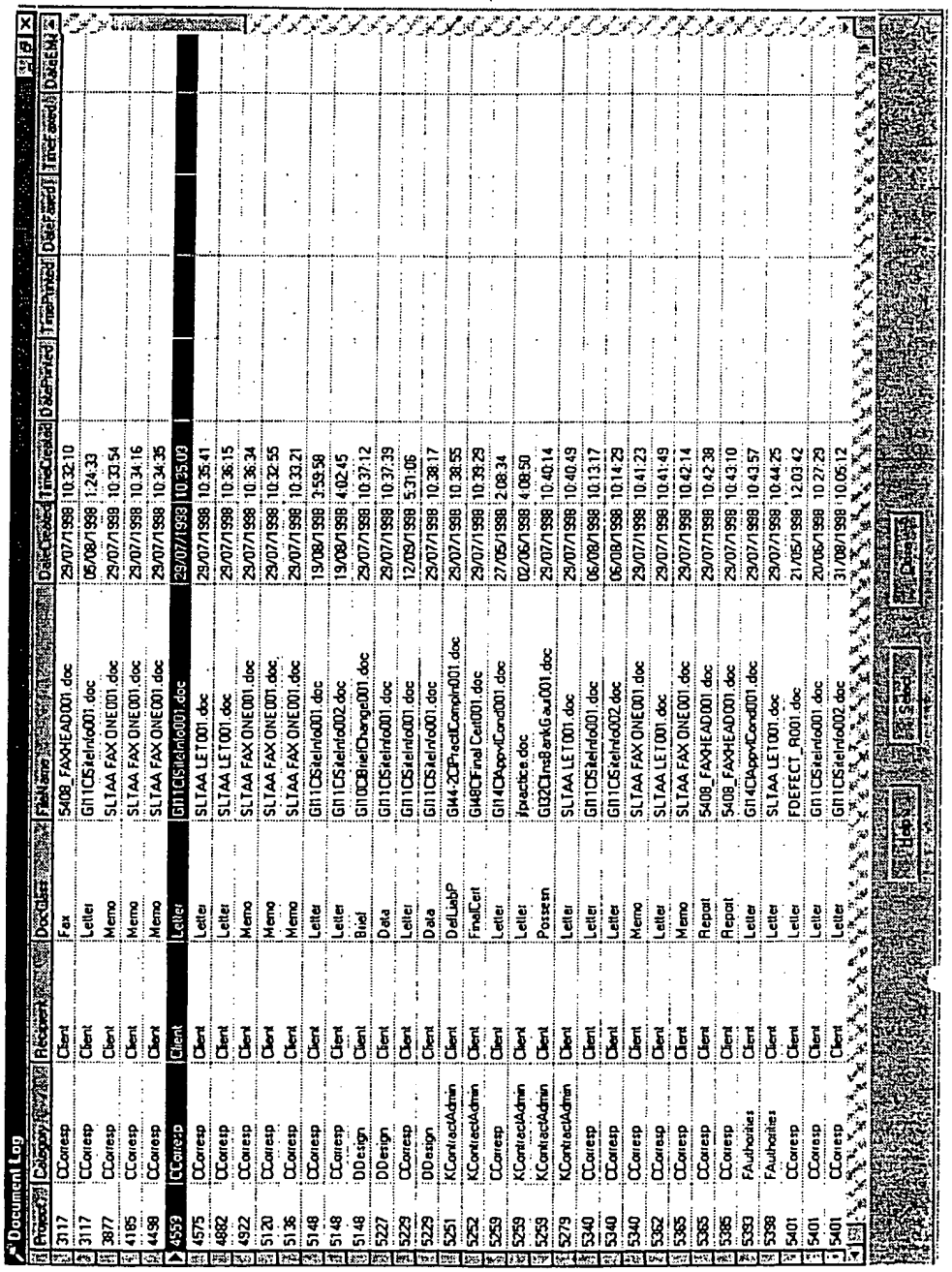

Contact Selection
Code
Type
Name
Company
Phone
ABCGALL StructEng Mr Ken Gadstone ARMCOS 38321536
ADMIN Client Office Administration
ARNOLDN Client Mr Malcolm Abbey Baldrock Christian Fellows 07 3399 5255
BLUENYO Client Mr John Youbrick Bledeslow Club 074 6221700
CANNING Client Mr Mark Cabnote Candestone Technologies 07 3278 1063
CARUANA Client Mr Rad Cabbauge Rad Holdings 07 3833 9836
CATALAN Client Mr Bill Cavouge Big Pineapple Stores 07 3878 2645
CONDRA Client Mr Abe Cabieros Technos Pty Ltd 07 3844 3076
CRAIGA Client Mr Micheal Berry Crain Garrington Trust 07 3835 1327
CROWLEY Client Mr Best Crow T K Pty Ltd
DRIVASE Client Mr Ed Cairns Drive Care 07 3846 4667
DUNNETF InteriorDesig Mr Tim Bohgnoe Dunn & Estra Pty Ltd 38392356
EASTG Client Mr Gerry Brades Estrogen Management 07 3870 4789
FALVEYJ Client Mr John Beesley Fallings Valley Wines 07 3290 2267
FOLEYT Client Mr Tad Forrest Fosseys Stores 07 3354 5478
GARDENJ Client Mr Jill Bradock Garden World Australia 07 3368 2478
GARNETT Client Mr Ross Berry Garage Network Traders Unknown

FIG. 7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Category
Recipient
DocClass
FileName
DateCreated
TimeCreated
DateSaved
TimeSaved
DateFaxed
TimeFaxed
DocNum
5408_FAXHEAD001.doc
GI11CSIeInfo001.doc
SLTAA FAX ONE001.doc
SLTAA LET001.doc
GI11CSIeInfo002.doc
GI11CBriefChange001.doc
GI44.2CPriceICompln001.doc
GI48CFinalCert001.doc
GI14CApprvlCond001.doc
jpractice.doc
GI32CInstBankGuar001.doc
FDEFECT_R001.doc
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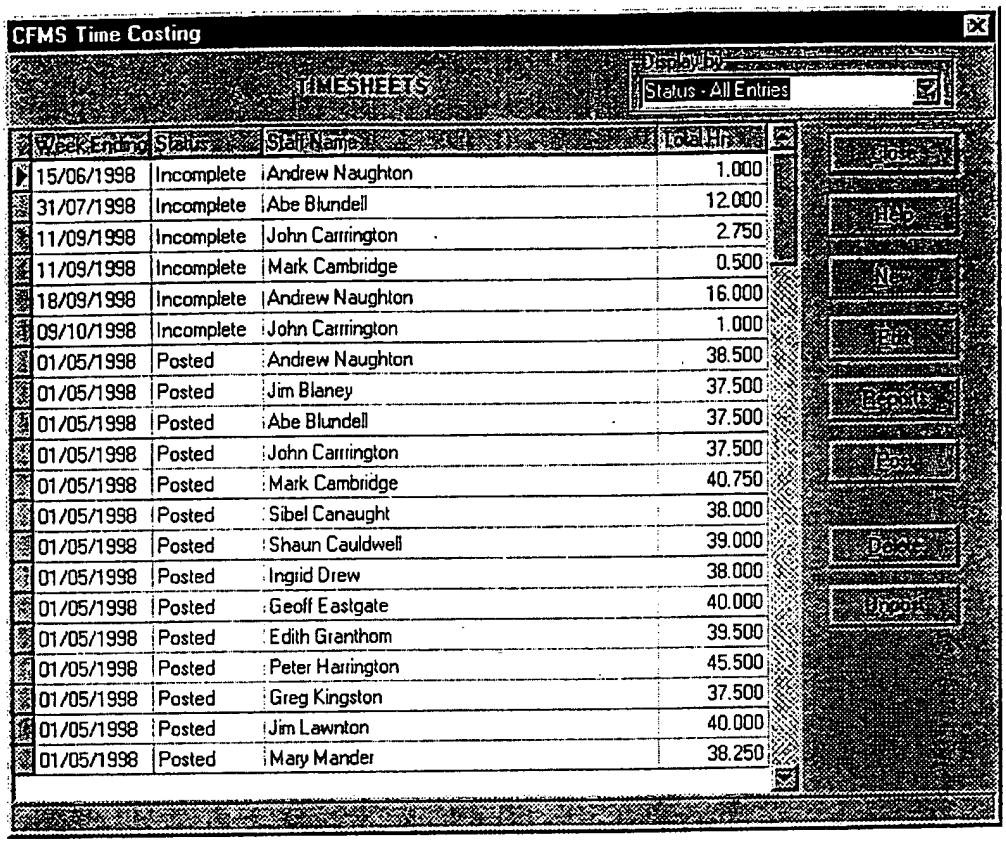
Letter
Memo
Data
Repat
Possessn
Brief
FinalCert

FIG. 8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Display by:
Status - All Entries
Week Ending
Status
Staff Name
Total Hrs
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31/07/1998 Incomplete Abe Blundell 12.000
11/09/1998 Incomplete John Carrington 2.750
11/09/1998 Incomplete Mark Cambridge 0.500
18/09/1998 Incomplete Andrew Naughton 16.000
09/10/1998 Incomplete John Carrington 1.000
01/05/1998 Posted Andrew Naughton 38.500
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01/05/1998 Posted Jim Lawnton 40.000
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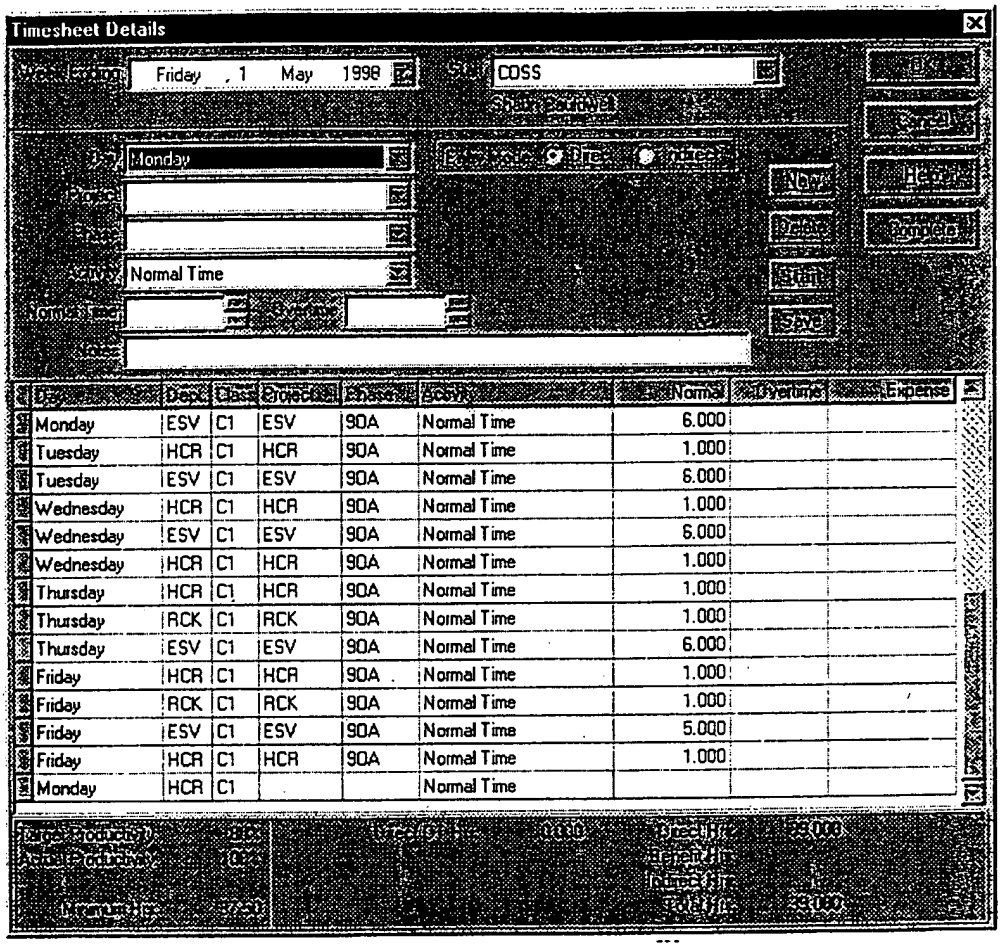
FIG. 9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Friday 1 May 1998
COSS
Monday
Normal Time
Day
Dept
Class
Project
Cost
Activity
Normal
Overtime
Expense
Monday ESV C1 ESV 90A Normal Time 6.000
Tuesday HCR C1 HCR 90A Normal Time 1.000
Tuesday ESV C1 ESV 90A Normal Time 6.000
Wednesday HCR C1 HCR 90A Normal Time 1.000
Wednesday ESV C1 ESV 90A Normal Time 6.000
Wednesday HCR C1 HCR 90A Normal Time 1.000
Thursday HCR C1 HCR 90A Normal Time 1.000
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Thursday ESV C1 ESV 90A Normal Time 6.000
Friday HCR C1 HCR 90A Normal Time 1.000
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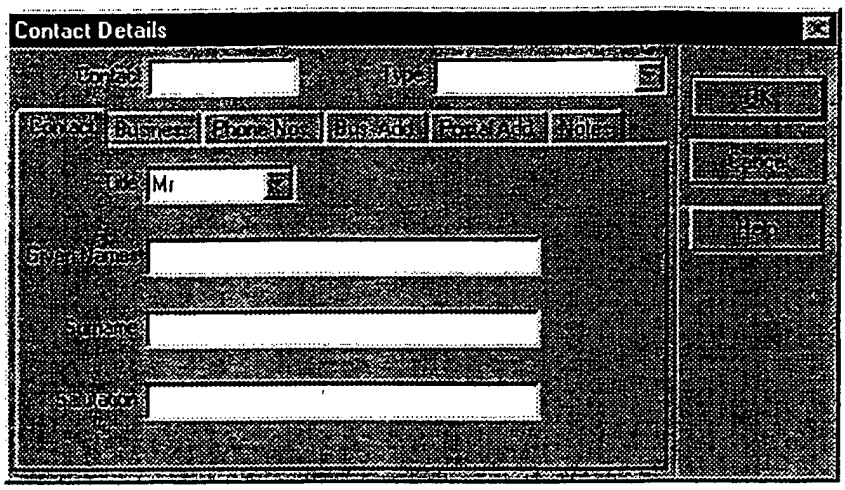
Monday HCR C1 Normal Time

FIG.10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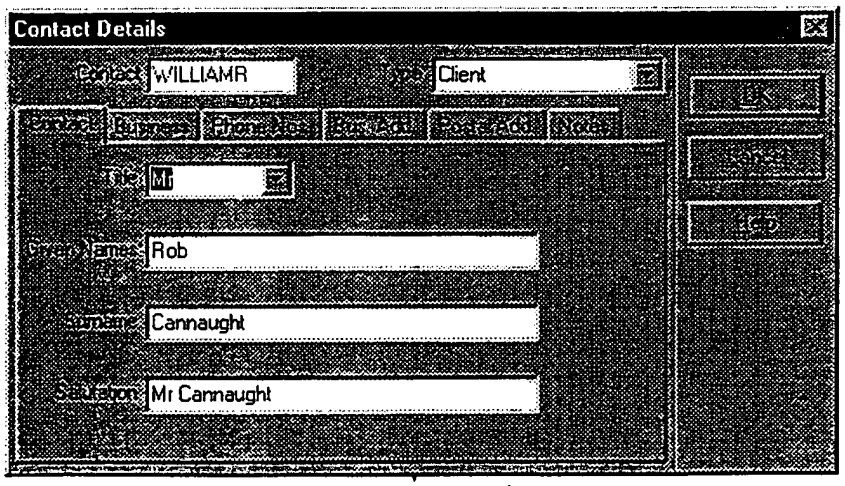
Phone Nos
Bus. Add
Post Add
Notes
Title
Mr
Given Names
Surname
Salutation
OK
Cancel
Help

FIG. 11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Contact
WILLIAMR
Type
Client
Business
Phone Nos
Bus. Add
Post Add
Notes
Title
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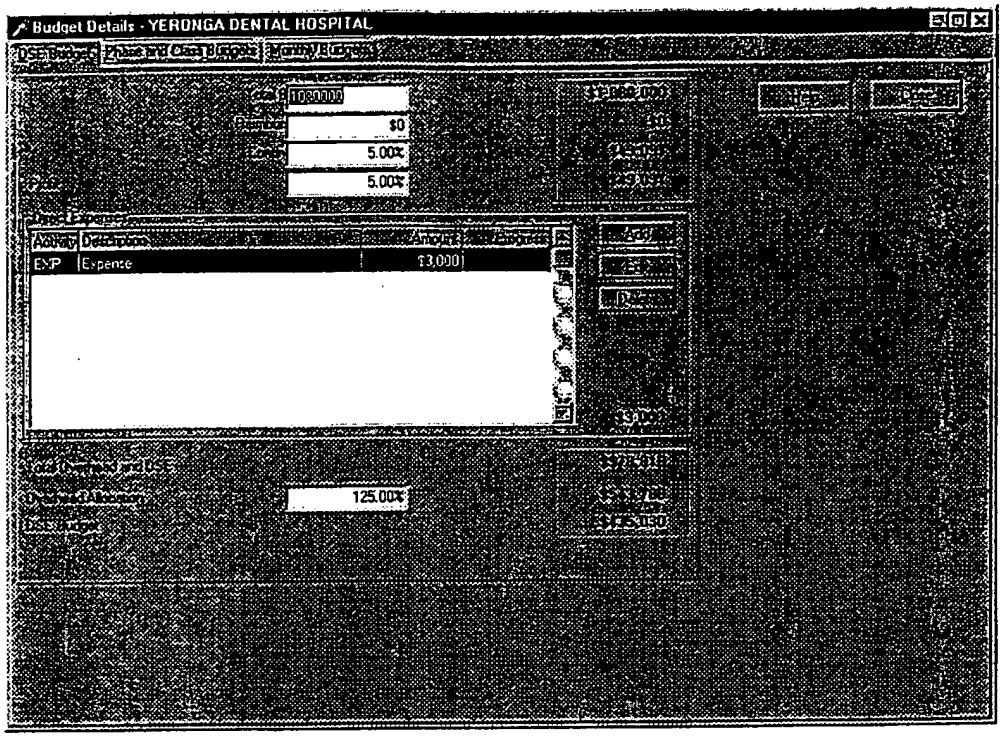
Given Names
Rob
Surname
Cannaught
Salutation
Mr Cannaught
OK
Cancel
Help

FIG. 12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Amount
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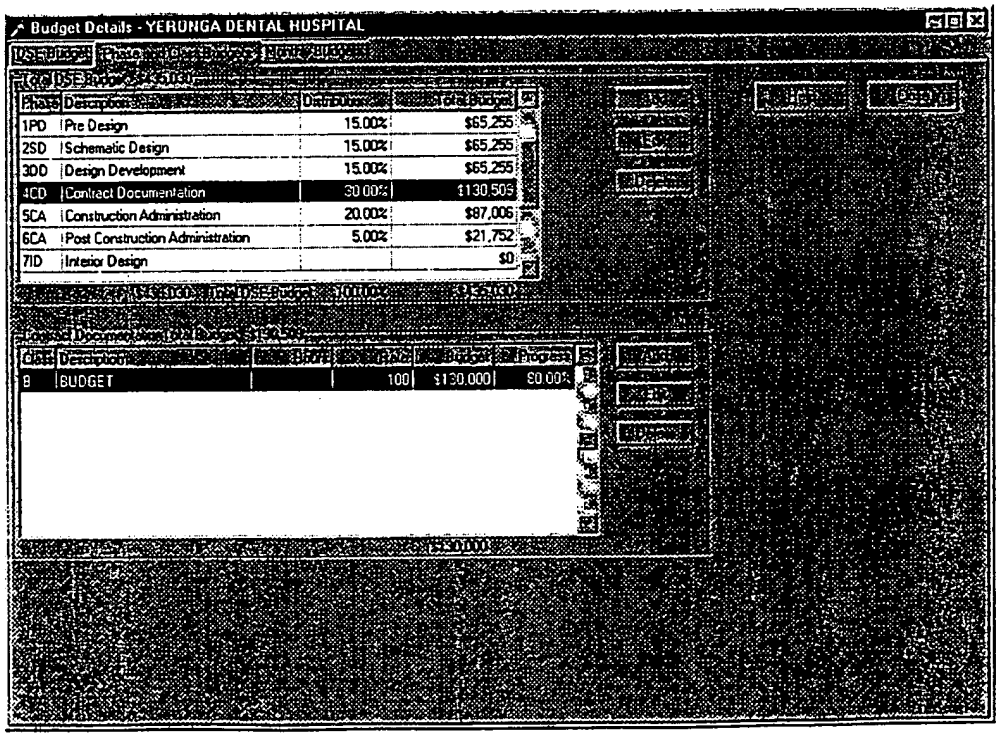
FIG. 13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Description
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Total Budget
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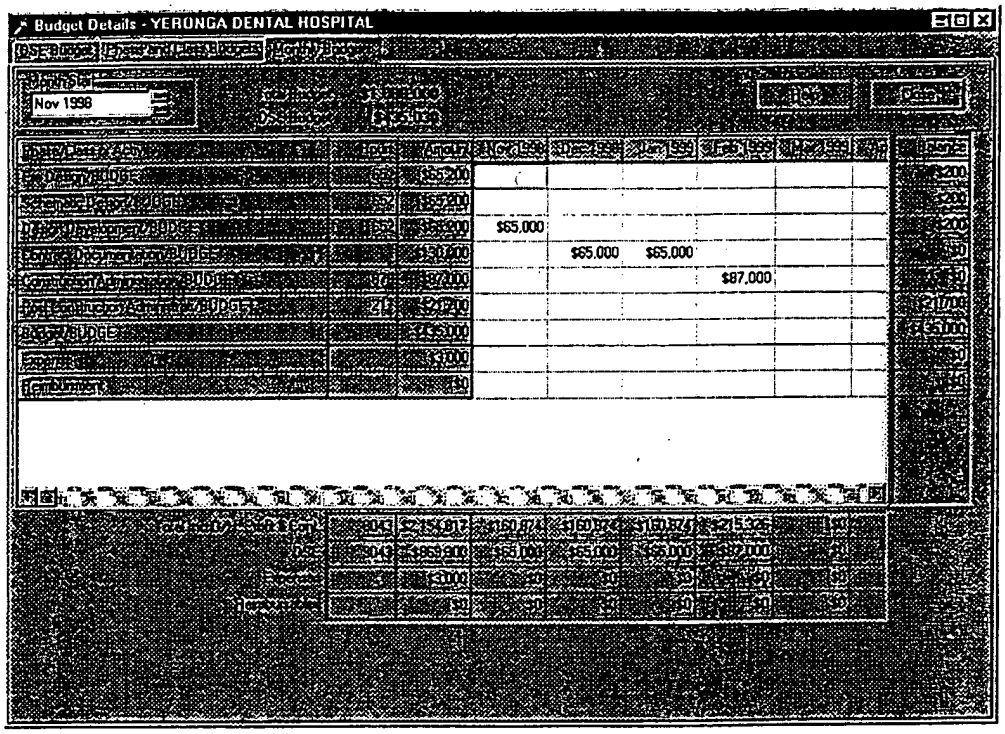
2SD Schematic Design 15.00% $65,255
3DD Design Development 15.00% $65,255
4CD Contract Documentation 30.00% $130,509
5CA Construction Administration 20.00% $87,006
6CA Post Construction Administration 5.00% $21,752
7ID Interior Design $0
Class
Description
Budget
Progress
B BUDGET 100 $130,000 80.00%

FIG. 14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Nov 1998
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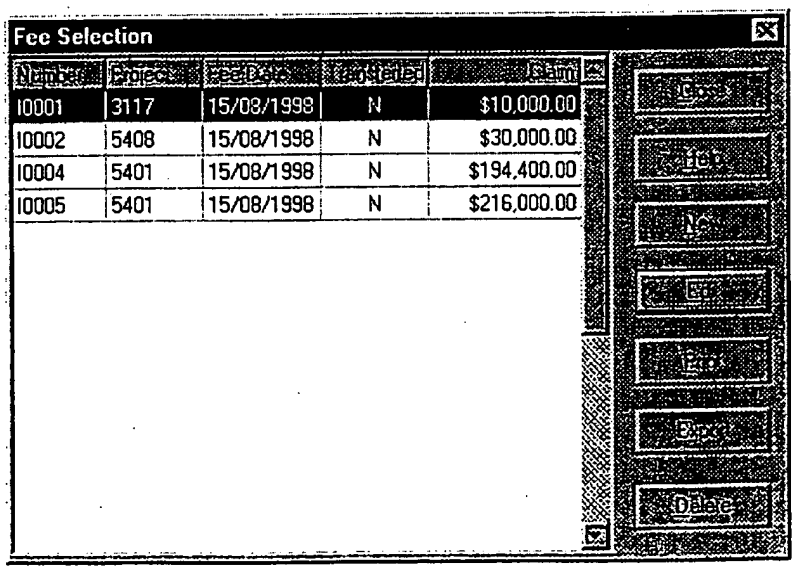
$65,000
$87,000

FIG 15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Number
Project
Fee Date
Completed
Claim
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10002 5408 15/08/1998 N $30,000.00
10004 5401 15/08/1998 N $194,400.00
10005 5401 15/08/1998 N $216,000.00
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FIG. 16

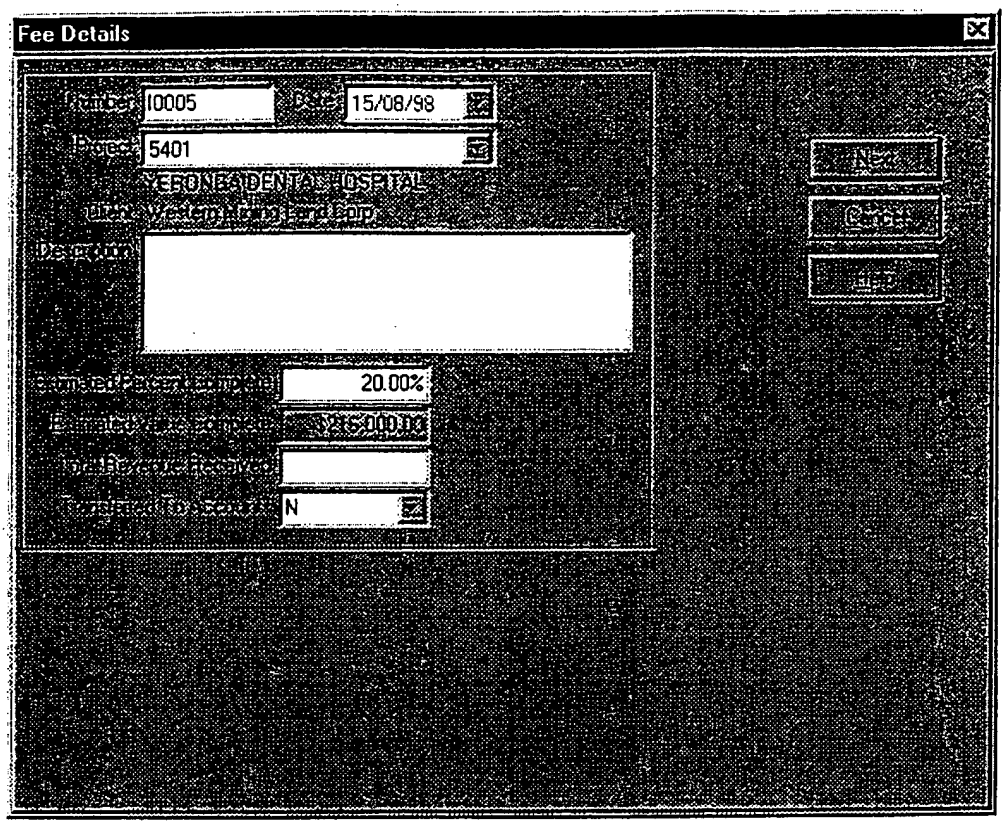
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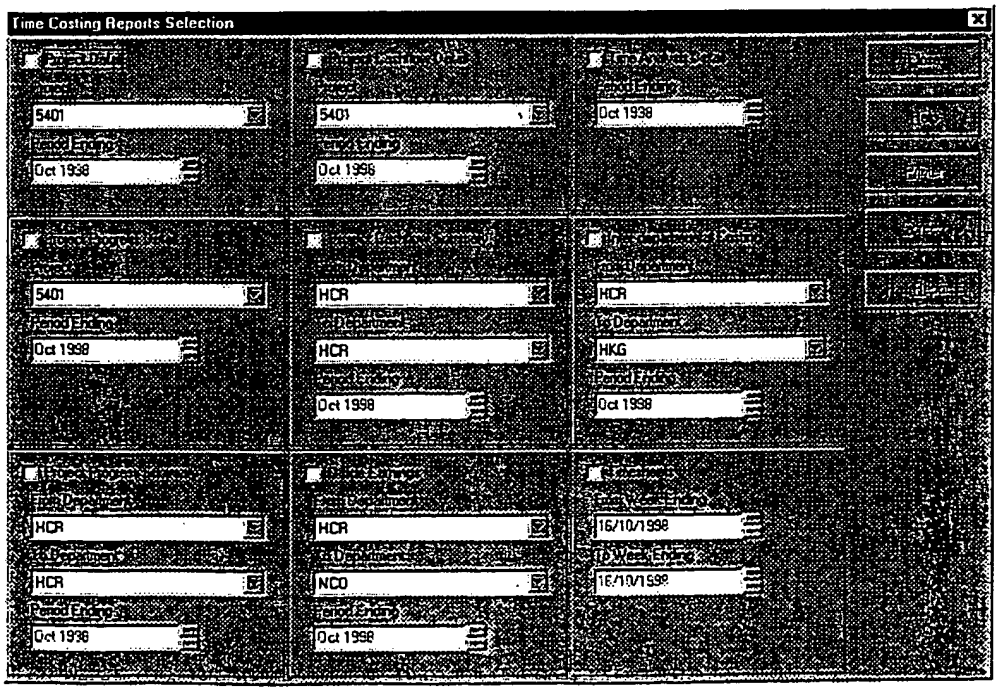
FIG. 17


Time Costing Reports Selection
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Oct 1998
HCR
HKG
NCO
16/10/1998

FIG. 18

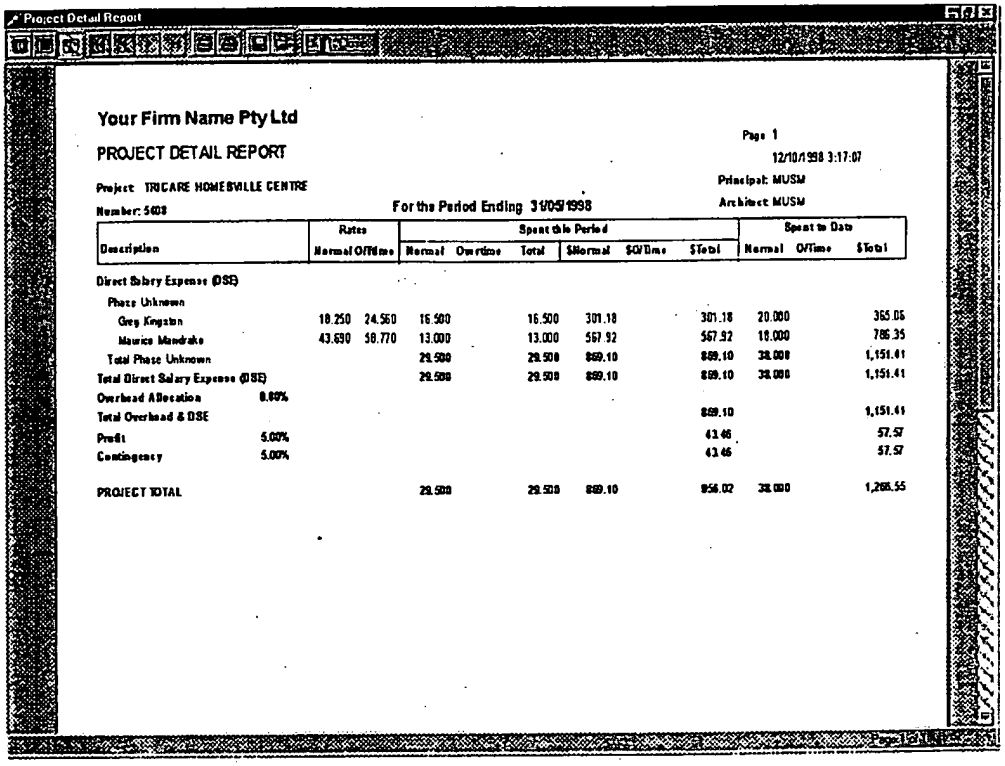
Project Detail Report
Your Firm Name Pty Ltd
PROJECT DETAIL REPORT
Page 1
12/10/1998 3:17:07
Project TRICARE HOMEBVILLE CENTRE
Number: 5408
For the Period Ending 31/09/1998
Principal: MUSM
Architect MUSM
Description
Rates
Normal OfTime
Spent this Period
Normal Overtime Total $Normal $OfTime $Total
Spent to Date
Normal OfTime $Total
Direct Salary Expense (DSE)
Phase Unknown
Greg Kingston 18.250 24.560 16.500 16.500 301.18 301.18 20.000 365.06
Maurice Mandrake 43.690 58.770 13.000 13.000 567.92 567.92 18.000 786.35
Total Phase Unknown 29.500 29.500 869.10 869.10 38.000 1,151.41
Total Direct Salary Expense (DSE) 29.500 29.500 869.10 869.10 38.000 1,151.41
Overhead Allocation 8.00%
Total Overhead & DSE 869.10 1,151.41
Profit 5.00% 43.46 57.57
Contingency 5.00% 43.46 57.57
PROJECT TOTAL 29.500 29.500 869.10 956.02 38.000 1,266.55

FIG. 19

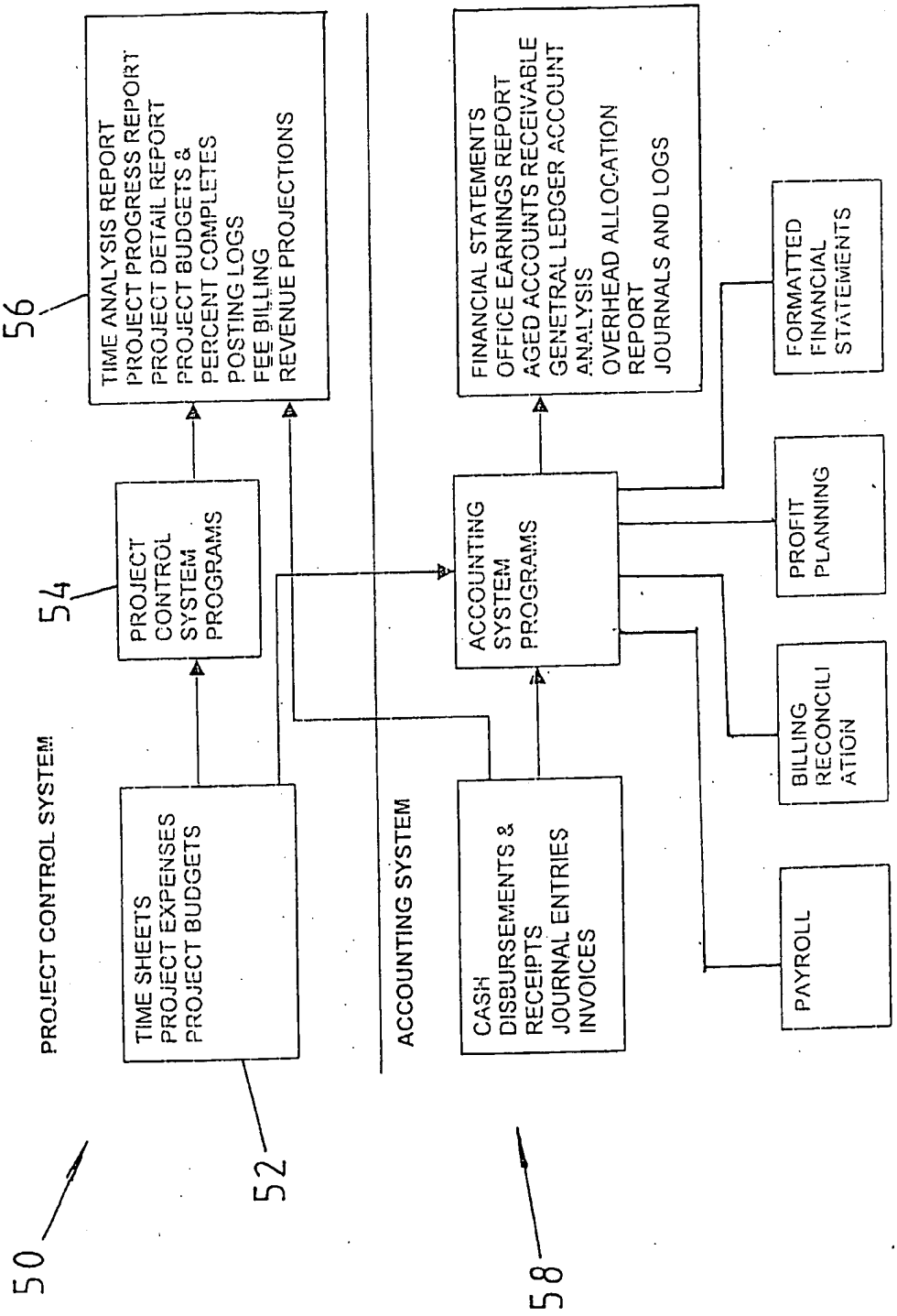
PROJECT CONTROL SYSTEM
ACCOUNTING SYSTEM
50
52
54
56
58
TIME SHEETS
PROJECT EXPENSES
PROJECT BUDGETS
PROJECT CONTROL SYSTEM PROGRAMS
TIME ANALYSIS REPORT
PROJECT PROGRESS REPORT
PROJECT DETAIL REPORT
PROJECT BUDGETS & PERCENT COMPLETES
POSTING LOGS
FEE BILLING
REVENUE PROJECTIONS
CASH DISBURSEMENTS & RECEIPTS
JOURNAL ENTRIES
INVOICES
ACCOUNTING SYSTEM PROGRAMS
FINANCIAL STATEMENTS
OFFICE EARNINGS REPORT
AGED ACCOUNTS RECEIVABLE
GENETRAL LEDGER ACCOUNT ANALYSIS
OVERHEAD ALLOCATION REPORT
JOURNALS AND LOGS
PAYROLL
BILLING RECONCILI ATION
PROFIT PLANNING
FORMATTED FINANCIAL STATEMENTS

FIG. 20

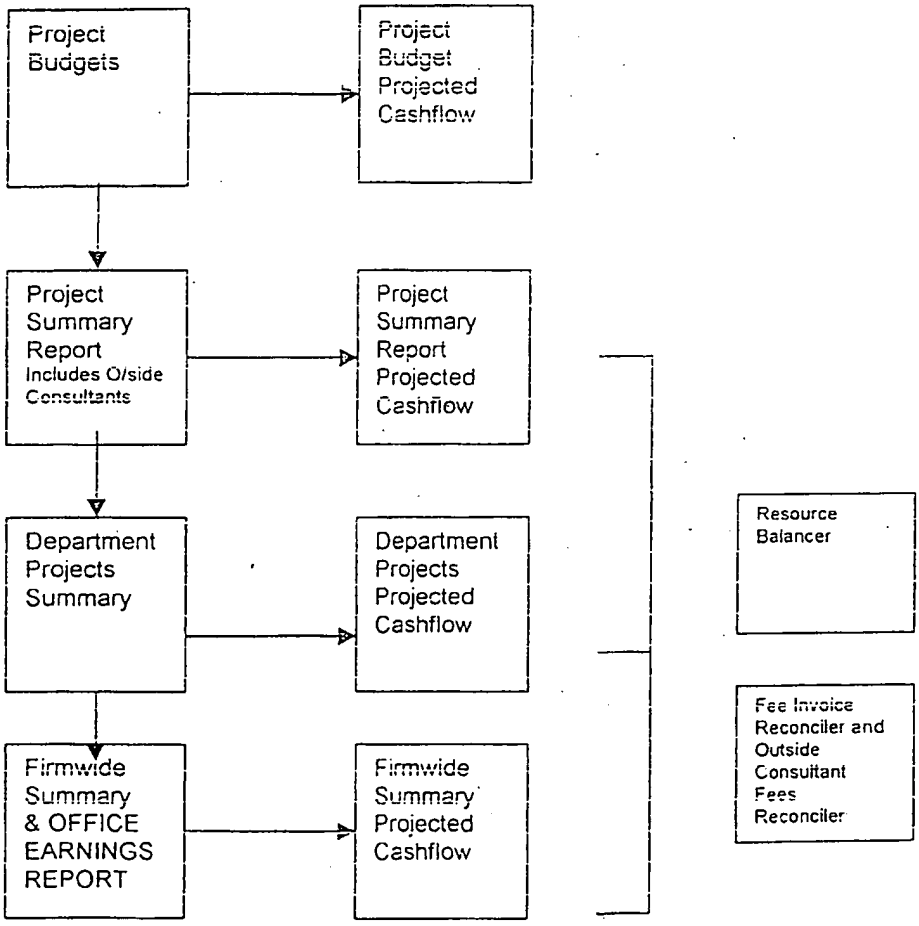
Project Budgets
Project Budget Projected Cashflow
Project Summary Report Includes O/side Consultants
Project Summary Report Projected Cashflow
Department Projects Summary
Department Projects Projected Cashflow
Firmwide Summary & OFFICE EARNINGS REPORT
Firmwide Summary Projected Cashflow
Resource Balancer
Fee Invoice Reconciler and Outside Consultant Fees Reconciler

FIG. 21

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU 98/00887

A. CLASSIFICATION OF SUBJECT MATTER

Int Cl[6]: G06F 17/60

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
Int Cl[6] G06F 17/60, Int Cl[5] G06F 15/21

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WPAT: - PROJECT# OR TASK# OR ORGANI:
IBM PAT NETWORK: - PROJECT AND MANAGEMENT

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5671360 A (HAMBRICK et al.) 23 September 1997 See entire document but in particular column 4 line 60 to column 5 line 56, Column 8 line 3	1-13
P,X	US 5761674 (ITO) 2 June 1998 See entire document but in particular column 2 line 5 to column 3 line 12	1-13
A	EP 0540442 (INTERNATIONAL BUSINESS MACHINES CORPORATION) 5 May 1993 Entire document	1-13

☐ Further documents are listed in the continuation of Box C

☒ See patent family annex

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
18 December 1998	05 January 1999

Name and mailing address of the ISA/AU	Authorized officer
AUSTRALIAN PATENT OFFICE PO BOX 200 WODEN ACT 2606 AUSTRALIA Facsimile No.: (02) 6285 3929	**J.W. THOMSON** Telephone No.: (02) 6283 2214

Form PCT/ISA/210 (second sheet) (July 1998) copder

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/AU 98/00887

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member	
EP	0540442	JP	5225206
US	5761674	JP	6044255

END OF ANNEX

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